

TASK ANALYSIS Rick Hudson, M.Ed., M.R.C., Field Training Coordinator, KATC

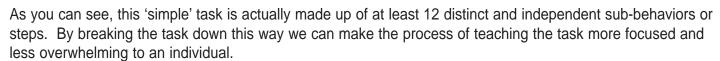
Task Analysis is the analysis and breaking down of these sub-behaviors. Task analysis is used most often with those who have problems mastering complex behaviors. Through the process of conducting a task analysis a teacher or parent examines a task that they are attempting to teach by breaking it down into it's component

Every day we perform many tasks without considering the complexity of the activity in which we are engaged. We are so accustomed to performing tasks (like brushing our teeth, washing our hands, preparing our food etc.), we don't realize that activities like these are very complex, comprised of many smaller, discrete, singular, specific sub-behaviors that we must perform in a certain order to successfully perform a specific task.

Consider a task that is commonly taught both at home and at school, washing your hands. This task seems simple enough but let's look at a task analysis of this 'simple task.'

We begin a task analysis by doing the task ourselves and writing down each individual step that makes up the whole process of the completing the task.

- 1. Go to sink
- 2. Turn on BOTH the HOT and COLD faucets
- 3. Place hands under the running water
- 4. Rub hands together
- 5. Put ONE pump of soap on the hands
- 6. Rub hands together
- 7. Place hands under running water
- 8. Rinse ALL soap off hands
- 9. Turn off BOTH the HOT and COLD faucets
- 10. Take paper towel from dispenser
- 11. Rub paper towel on front and back of hands
- 12. Throw paper towel in trash



Once broken down into individual steps, each step can be taught as an individual behavior and then as the individual demonstrates mastery of a component, the next component can be added. This is particularly effective when paired with the use of reinforcement, such as snacks, toys or tokens. The effectiveness of this approach can also be dramatically increased if the successful completion of the steps leads to a natural reinforcer such as after washing ones hands the individual can then gain access to a preferred activity such as a meal.

In the example of washing hands, the individual could be provided with a reinforcer for successfully performing the fist step in the task, going to the sink. Each time the individual is instructed to "wash your hands" and they go to the sink.

In the next step of instruction, the individual is taught how to turn on the water and is now only given the reinforcer when he/she is prompted to "wash your hands" and they both go to the sink and successfully turn on the water. As the individual masters each new step, that step is added as a criteria for earning the reinforcer.

The components of a task analysis form a behavioral chain that is a set of responses linked to a single stimulus. In the example above, the chain of behaviors that collectively make up handwashing are prompted by the stimulus "Wash Your Hands." Even if the individual can already perform the component pieces in a task, the teacher or parent must chain these pieces into a whole that is prompted by the stimulus "Wash Your Hands." In other words, the teacher or parent must chain the various parts of handwashing together in a sequence which the individual must perform correctly in order to receive reinforcement.



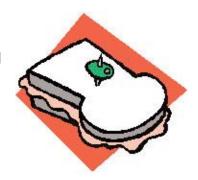
In order to create this chain the teacher or parent makes each component the stimulus for the next piece of the task that is to be performed. In the case of hand washing the step of going to the sink would become the stimulus for he next step, turning on the water, which is under the stimulus control of going to the sink. Once this chain is well established then it can become a link in a larger chain.

The stimulus "Get Ready For Lunch" may include the individual putting away their current materials, washing their hands and lining up at the door. In this case each of the steps in getting ready for lunch' is a chain that together make up a larger chain.

Task analysis has many applications, from the development of functional behaviors to more complex vocational skills and activities of daily living. Once a task is broken down into its component steps, then each step can be represented visually for those individuals who benefit from visual supports.

The following example was developed with Angie Lilly, an occupational therapist with Hardin County Schools. In this example, the adult with autism with whom we were working on independent functioning, often did not like his lunch options and would engage in negative behaviors to avoid lunch on these days. It was decided that giving this individual the skill to make his preferred lunch, a sandwich, was both functionally age appropriate and promoted independence.

Ms. Lilly started the task analysis by making a sandwich herself, noting all of the steps involved. Visual prompts of each step were created and placed in trays that would hold each of the components for that step (e.g.,



bread, meat). The individual had the raw materials and a visual guide to make the item he desired, thus resulting in a natural reinforcement at the end, he makes the sandwich and his reinforcer is that he gets to eat the sandwich.

Task analysis is a very simple process that can be very useful in assisting individuals and individuals with autism to understand what is expected of them and to learn to complete complex behaviors. With practice teachers, parents, job coaches and other professionals can quickly and easily break difficult to understand tasks into their component steps and begin teaching the individual with autism the task in more manageable chunks of learning. Through this process you may find the individual gains not only valuable skills but new levels of independence and the ability to engage in productive, functional activities that could one day lead to vocational success.



RESOURCE: Visual Recipes: A Cookbook for Non-Reader by Tabitha Orth

This unique cookbook was designed specifically for visual learners who have autism spectrum disorders (ASD) or other developmental delays. The author, the parent of a child with ASD, designed this cookbook in order to teach her son fundamental skills in the kitchen. The book contains 35 recipes grouped in the following categories: breakfast; lunch; side dishes; snacks, desserts; and drinks. The recipes consist of picture-based directions, and each step is framed for visual clarity. Simple text directions also accompany each step, and the importance of safety is highlighted. The book can also be used to teach functional math and beginning reading skills. (Spiral bound; 107 pages.)